Application No. 10/791,755

Attorney Docket 016907-1610

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-6. (Canceled)
- 7. (Previously Presented) The heating mechanism comprising:
  a cylindrical heating member which supplies heat to a sheet and which it

a cylindrical heating member which supplies heat to a sheet and which includes a central axis;

a first coil body which comprises a first magnetic core and which increases temperature of the heating member, wherein the first magnetic core (i) extends parallel to the central axis; (ii) comprises two end portions; (iii) comprises a first portion having electric wire material arranged therein and having a first length in the direction of the central axis; and (iv) comprises a second portion having a second length different from the first length in the direction of the central axis; and

a second coil body which comprises a second magnetic core and which increases the temperature of the heating member, the second magnetic core extending parallel to the central axis and having two end portions, wherein at least one end portion opposes a first magnetic core end portion in the direction of the central axis.

- 8. (Previously Presented) The heating mechanism according to claim 7, wherein the second portion of the first magnetic core has at least one projection at an end portion opposing the second magnetic core.
- 9. (Previously Presented) The heating mechanism according to claim 7, wherein the second magnetic core has a third portion having a third length in the direction of the central axis and having electric material arranged therein, and a fourth portion having a fourth

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length in the direction of the central axis, wherein the third length differs from the fourth length.

- 10. (Previously Presented) The heating mechanism according to claim 9, wherein the second portion of the first magnetic core has a projection at least one end portion, and the fourth portion of the second magnetic core has at least one projection at an end portion opposing the first magnetic core.
- 11. (Previously Presented) The heating mechanism according to claim 10, wherein the second portion of the first magnetic core opposes the fourth portion of the second magnetic core in the direction of the central axis.
- 12. (Previously Presented) The heating mechanism according to claim 9, wherein the first portion of the first magnetic core opposes the fourth portion of the second magnetic core in the direction of the central axis, and the second portion of the first magnetic core opposes the third portion of the second magnetic core in the direction of the central axis.
- 13. (Previously Presented) The heating mechanism according to claim 12, wherein the projection included in the second portion of the first magnetic core opposes the projection included in the fourth portion of the second magnetic core, in a direction orthogonal to the central axis.
- 14. (Previously Presented) The heating mechanism according to claim 7, wherein a distance between the first portion of the first magnetic core and the third portion of the second magnetic core is shorter than a distance between the second portion of the first magnetic core and the fourth portion of the second magnetic core.

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15. (Previously Presented) The heating mechanism according to claim 7, wherein the first coil body has a coil member wound around the first magnetic core along a direction orthogonal to the central axis, and the second coil body has a coil member wound around the second magnetic core along the direction orthogonal to the central axis.

16-24. (Canceled)

## 25. (New) A heating mechanism comprising:

a cylindrical heating member which supplies heat to a sheet and which includes a central axis;

a first coil body which includes a first magnetic core and which increases a temperature of the heating member, the first magnetic core extending parallel to the central axis and having two end portions, wherein at least one end portion has a first surface forming a predetermined angle relative to the central axis; and

a second coil body which includes a second magnetic core and which increases the temperature of the heating member, the second magnetic core extending parallel to the central axis and having two end portions, wherein at least one end portion has a second surface forming a predetermined angle relative to the central axis,

the first surface having a portion opposing the second surface in a direction orthogonal to the central axis,

wherein the first and the second surfaces form an angle between 5 and 60 degrees with respect to the central axis.

## 26. (New) A heating mechanism comprising:

a cylindrical heating member which supplies heat to a sheet and which includes a central axis;

a first coil which increases temperature of the heating member and which includes portions away from the heating member by different distances; and

a second coil which increases the temperature of the heating member and which includes portions away from the heating member by different distances.

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wherein the second coil is closest to the heating member at a second coil end portion adjacent to the first coil.

## 27. (New) A heating mechanism comprising:

a cylindrical heating member which supplies heat to a sheet and which includes a central axis;

a first coil body which includes a first magnetic core and which increases temperature of the heating member, the first magnetic core including portions away from the heating member by different distances; and

a second coil body which includes a second magnetic core and which increases the temperature of the heating member, the second magnetic core including portions away from the heating member by different distances,

wherein the second magnetic core is closest to the heating member at a second magnetic core end portion adjacent to the first magnetic core.